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MEMORANDUM

TO: Chris Lichens, Remedial Project Manager
Site Cleanup Section 4, SFD-7-4

THROUGH: Rose Fong, ESAT Task Order Manager (TOM) RF
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00105077 Amendment 3

DATE: September 14, 2007

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Omega Chem OU2
Site Account No.:	09 BC LA02
CERCLIS ID NO.:	CAD042245001
Case No.:	36520
SDG No.:	Y3CN1
Laboratory:	Shealy Environmental Services, Inc. (SHEALY)
Analysis:	Trace Volatiles
Samples:	20 Groundwater Samples (see Case Summary)
Collection Date:	July 18, 19, 20, and 23, 2007
Reviewer:	Kendra DeSantolo, ESAT/Laboratory Data Consultants

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Hurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] Attention [X] Action

SAMPLING ISSUES: [X] Yes [ ] No

Data Validation Report

Case No.: 36520
SDG No.: Y3CN1
Site: Omega Chem OU2
Laboratory: Shealy Environmental Services, Inc.
Reviewer: Kendra DeSantolo, ESAT/LDC
Date: September 14, 2007

I. CASE SUMMARY

Sample Information

Samples:	Y3CN1 through Y3CN9 and Y3CP0 through Y3CQ0
Concentration and Matrix:	Low/Medium Concentration Water
Analysis:	Trace Volatiles
SOW:	SOM01.1 and Modification Reference No. 1363.2
Collection Date:	July 18, 19, 20, and 23, 2007
Sample Receipt Date:	July 19, 20, 21, and 24, 2007
Extraction Date:	Not Applicable
Analysis Date:	July 24 through 27, 2007

Field QC

Field Blanks (FB):	Y3CN5, Y3NP1, Y3CP6, and Y3CQ2 (in SDG Y3CQ1)
Equipment Blanks (EB):	Not provided
Trip Blank (TB):	Not provided
Background Samples (BG):	Not provided
Field Duplicates (D1):	Y3CP9 and Y3CQ0

Laboratory QC

Method Blanks & Associated Samples:

VBLK24:	Y3CN5
VBLK2X:	Y3CN6, Y3CN7, Y3CP0 through Y3CP4, Y3CP7 through Y3CQ0
VBLK25:	Y3CN6RE, Y3CN7RE, Y3CP0RE through Y3CP4RE, Y3CP7RE through Y3CQ0RE, Y3CN1 through Y3CN3, Y3CN8, Y3CP5, Y3CP6
VBLK26:	Y3CN1DL, Y3CN2DL, Y3CN3DL, Y3CN3DL2, Y3CN4, Y3CN4DL, Y3CN8DL, Y3CN9, Y3CN9DL
VBLK1D:	Y3CP5DL, storage blank VHBLK32

Tables

- 1A: Analytical Results with Qualifications
- 1B: Data Qualifier Definitions for Organic Data Review
- 2: Calibration Summary

CLP PO Action

Nondetected results for 1,4-dioxane in samples Y3CN1, Y3CN5 through Y3CN7, and Y3CP0 through Y3CQ0; all method blanks; and storage blank VHBLK32 are qualified as rejected (R) due to very low relative response factors (RRFs <0.01) in initial and continuing calibrations (see Comment A).

CLP PO Attention

1. Detected results for some analytes are qualified as nondetected and estimated (U,J) due to method blank and storage blank contamination (see Comment C).

2. Results for some analytes are qualified as estimated (J) due to calibration problems (see Comment D).

3. Results for some analytes are qualified as estimated (J) due to deuterated monitoring compound (DMC) recovery problems (see Comment E).

4. Detected results for trichlorofluoromethane, 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoroethane, chloroform, trichloroethene, and tetrachloroethene in sample Y34L2 are qualified as estimated (J) due to concentrations exceeding calibration range (see Comment F).

Sampling Issues

The sampler signature is missing on traffic report & chain of custody records (TR/COCs) for samples collected on 07/18/07 through 07/20/07 (see attached TR/COCs, pp. 5 through 7 in data package).

Additional Comments

The ending CCV for 07/25/07 was not analyzed due to an instrument malfunction. The CCV analyzed on 07/26/07 06:07 was used as the 07/25/07 ending CCV for data qualification.

For sample Y3CN4, there were large discrepancies between results for the 5-fold dilution and 50-fold dilution. The SDG Narrative (attached) indicated that there may be "a one-time instrument malfunction that extra volume of the internal standard spiking solution was added" to the 50-fold diluted analysis. Only results for the 5-fold dilution are reported in Table 1A.

All surrogates did not pass acceptance limits in the method blank VBLK2X analyzed on 07/24/07 (see Comment E). The associated samples were reanalyzed the following day and both sets of data were included in the data package. Results for first analyses (on 07/24/07) were reviewed and reported in Table 1A since both sets of data are very similar.

Other than laboratory artifacts (approximate retention times of 2.4, 4.3, 5.8, 9.2, 11.6, 12.2-13.0, 13.4, 14.1, 15.0, 15.3, and 15.9 minutes), tentatively identified compounds (TICs) were found in samples Y3CN4 and Y3CN9 (see attached Form 1Js).

The laboratory performed manual integrations on calibrations due to incorrect auto integration. Manual integrations were reviewed and found to be satisfactory and in compliance with proper integration techniques.

This report was prepared in accordance with the following documents:

- ESAT Region 9 Standard Operating Procedure 901, *Guidelines for Data Review of Contract Laboratory Program Analytical Services Volatile and Semivolatile Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration,* SOM01.1, May 2005; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, January 2005.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Holding Time/Preservation	Yes	
2.	GC/MS Tune/GC Performance	Yes	
3.	Initial Calibration	No	A, D
4.	Continuing Calibration	No	A, D
5.	Laboratory Blanks	No	C
6.	Field Blanks	Yes	
7.	Deuterated Monitoring Compounds	No	E
8.	Matrix Spike/Matrix Spike Duplicates	N/A	
9.	Laboratory Control Samples/Duplicates	N/A	
10.	Internal Standards	Yes	
11.	Compound Identification	Yes	
12.	Compound Quantitation	Yes	B, F, G, H
13.	System Performance	Yes	
14.	Field Duplicate Sample Analysis	Yes	

N/A = Not Applicable

III. VALIDITY AND COMMENTS

A. Nondetected results for the following analyte are qualified as rejected due to very low RRFs in initial and continuing calibrations and are flagged "R" in Table 1A.

- 1,4-Dioxane in samples Y3CN1, Y3CN5 through Y3CN7, and Y3CP0 through Y3CQ0; all method blanks; and storage blank VHBLK32

RRFs below 0.01 were reported for 1,4-dioxane in initial and continuing calibrations (see Table 2). Since results are nondetected, false negatives may exist.

DMC 1,4-dioxane-d8 also had RRFs below 0.01 in initial and continuing calibrations (see Table 2).

The RRF evaluates instrument sensitivity and is used in the quantitation of target analytes.

B. The following results, denoted with an "L" qualifier, are estimated and flagged "J" in Table 1A.

- All detected results below the contract required quantitation limits

Results below the contract required quantitation limits (CRQLs) are considered to be qualitatively acceptable, but quantitatively unreliable, due to the uncertainty in analytical precision near the limit of detection.

C. The following results are qualified as nondetected and estimated due to method blank and storage blank contamination and are flagged "U,J" in Table 1A.

- 1,1-Dichloroethene in samples Y3CN5, Y3CP0 through Y3CP4, Y3CP6, Y3CP7, and storage blank VHBLK32
- Methylene chloride in all samples and storage blank VHBLK32
- Chloroform in samples Y3CN1 through Y3CN3, Y3CN7, Y3CN8, Y3CP1, Y3CP3 through Y3CP5, Y3CP7, and Y3CP8

Methylene chloride and 1,1-dichloroethene were found in method blanks VBLK24, VBLK2X, VBLK25, VBLK26, and VBLK1D and chloroform was found in method blank VBLK1D and storage blank VHBLK32 (see Table 1A for concentrations). Results for the samples listed above are considered nondetected and estimated (U,J) and quantitation limits have been raised according to the blank qualification rules presented below.

No positive results are reported unless the concentration of the compound in the sample exceeds 10 times the amount in any associated blank for common laboratory contaminants or 5 times the amount for other compounds. If the sample result is greater than the CRQL, the quantitation limit is raised to the sample result and reported as nondetected. If the sample result is less than the CRQL, the result is reported as nondetected at the CRQL.

Chloroform results for samples Y3CN4 (140 μg/L), Y3CN9 (19 μg/L), Y3CP9 (6.4 μg/L), and Y3CQ0 (6.0 μg/L) and 1,1-dichloroethene results for samples Y3CN1 (24 μg/L), Y3CN2 (220 μg/L), Y3CN3 (7.0 μg/L), Y3CN4 (580 μg/L), Y3CN6 (0.93 μg/L), Y3CN7 (5.7 μg/L), Y3CN8 (17 μg/L), Y3CN9 (230 μg/L), Y3CP5 (14 μg/L), Y3CP8 (1.2 μg/L), Y3CP9 (1.8 μg/L), and Y3CQ0 (1.9 μg/L) are not qualified as nondetected and estimated since their concentrations exceed 5 times the amount in the associated method blanks.

A laboratory method blank is laboratory reagent water or baked sand analyzed with all reagents, deuterated monitoring compounds, and internal standards and carried through the same sample preparation and analytical procedures as the field samples. The laboratory method blank is used to determine the level of contamination introduced by the laboratory during analysis.

A storage blank is laboratory reagent water stored in a vial in the same area as the field samples. The storage blank is used to determine the level of contamination introduced by the laboratory during sample storage prior to analysis.

D. Results for the following analytes are qualified as estimated due to low RRFs in initial and continuing calibrations and are flagged "J" in Table 1A.

- 1,4-Dioxane in samples Y3CN2 through Y3CN4, Y3CN8, and Y3CN9
- Acetone in all samples, method blanks, and storage blank VHBLK32
- 1,2-dibromo-3-chloropropane in method blank VBLK1D and storage blank VHBLK32

RRFs below 0.01 were reported for 1,4-dioxane in initial and continuing calibrations (see Table 2). An average RRF of 0.049 was reported for acetone in the initial calibration; RRFs were below the 0.05 validation criterion for acetone and 1,2-dibromo-3-chloropropane in continuing calibrations (see Table 2).

Detected results for the analytes listed above may be biased low and should be considered as the minimum concentrations at which these analytes are present in the samples. Where results are nondetected, false negatives may exist.

The initial calibration demonstrates that the instrument is capable of acceptable performance in the beginning of the analytical run and of producing a linear calibration curve.

The continuing calibration checks the instrument performance daily and produces the relative response factors (RRFs) for target analytes that are used for quantitation.

E. Results for the following analytes are qualified as estimated due to DMC recoveries outside QC limits and are flagged "J" in Table 1A.

{1,1-Dichloroethene-d2}
- trans-1,2-Dichloroethene and cis-1,2-dichloroethene in samples Y3CN1 through Y3CN4, Y3CN9
- cis-1,2-dichloroethene in sample Y3CN7, Y3CN8 and Y3CP5

{Chloroform-d}
- 1,1-Dichloroethane in sample Y3CN2

- 1,1-Dichloroethane and chloroform in sample Y3CN4

DMC recoveries outside QC limits are shown below.

Sample	DMC	% Recovery	QC Limits
Y3CN1DL	1,1-Dichloroethene-d2	115	55-104
Y3CN1	1,1-Dichloroethene-d2	310	55-104
Y3CN2	1,1-Dichloroethene-d2	2433	55-104
Y3CN2DL	1,1-Dichloroethene-d2	134	55-104
Y3CN3	1,1-Dichloroethene-d2	129	55-104
Y3CN4	1,1-Dichloroethene-d2	744	55-104
Y3CN7	1,1-Dichloroethene-d2	125	55-104
Y3CN8	1,1-Dichloroethene-d2	184	55-104
Y3CN8DL	1,1-Dichloroethene-d2	109	55-104
Y3CN9	1,1-Dichloroethene-d2	720	55-104
Y3CN9DL	1,1-Dichloroethene-d2	157	55-104
Y3CP5	1,1-Dichloroethene-d2	169	55-104
VBLK2X	2-Butanone-d5	162	49-155
Y3CN1DL	Chloroform-d	122	78-121
Y3CN2DL	Chloroform-d	122	78-121
Y3CN4	Chloroform-d	137	78-121
Y3CP7	Chloroform-d	122	78-121

Qualified results may be biased high. For DMC recoveries that exceeded QC limits, only detected results for associated analytes are qualified. The recovery for DMC chloroform-d in sample Y3CP7 exceeded QC limit but associated sample results were not qualified because they were nondetects. The samples were not reanalyzed.

Surrogates (e.g., deuterated monitoring compounds (DMCs)) are organic compounds which are similar to the target analytes in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples. All samples are spiked with DMCs prior to purging. DMCs provide information about both the laboratory performance on individual samples and the possible effects of the sample matrix on the analytical results.

F. Detected results for the following analytes are qualified as estimated due to concentrations exceeding the calibration range and are flagged "J" in Table 1A.

- Trichlorofluoromethane, 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoromethane, chloroform, trichloroethene, and tetrachloroethene in sample Y3CN4

Concentrations of trichlorofluoromethane, 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoromethane, chloroform, trichloroethene, and tetrachloroethene in the undiluted analysis of sample Y3CN4 were 210 μg/L, 580 μg/L, 530 μg/L, 140 μg/L, 400 μg/L, and 1000 μg/L, respectively. These values exceed the 0.5-20 μg/L calibration

range. The laboratory reanalyzed sample Y3CN4 at a 50-fold dilution, but results differ widely from the undiluted results and are not reported in Table 1A (see Additional Comments section above).

Results reported in Table 1A for these analytes are from the undiluted analysis. These concentrations are considered to be qualitatively acceptable but quantitatively questionable and should be considered as the minimum concentrations at which the analytes are present in the sample.

G. Sample Y3CN1 was reanalyzed at a 10-fold dilution due to high levels of trichlorofluoromethane, 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoromethane, trichloroethene, and tetrachloroethene that exceeded the calibration range. Results for these analytes in sample Y3CN1 are reported from the diluted analysis in Table 1A; results for other analytes are reported from the undiluted analysis.

Sample Y3CN2 was reanalyzed at a 40-fold dilution due to high levels of 1,1-dichloroethene, 1,1-dichloroethane, cis-1,2-dichloroethene, 1,1,1-trichloroethane, trichloroethene, and tetrachloroethene that exceeded the calibration range. Results for these analytes in sample Y3CN2 are reported from the diluted analyses in Table 1A; results for other analytes are reported from the undiluted analysis.

Sample Y3CN3 was reanalyzed at 2-fold and 20-fold dilutions, due to a high level of tetrachloroethene that exceeded the calibration range. The result for tetrachloroethene in sample Y3CN3 is reported from the 20-fold diluted analysis in Table 1A; results for other analytes are reported from the undiluted analysis.

Sample Y3CN8 was reanalyzed at a 5-fold dilution due to high levels of trichloroethene and tetrachloroethene that exceeded the calibration range. Results for trichloroethene and tetrachloroethene in sample Y3CN8 are reported from the diluted analysis in Table 1A; results for other analytes are reported from the undiluted analysis.

Sample Y3CN9 was reanalyzed at a 20-fold dilution due to high levels of trichlorofluoromethane, 1,1-dichloroethene, 1,1,2-trichloro-1,2,2-trifluoromethane, trichloroethene, and tetrachloroethene that exceeded the calibration range. Results for these analytes in sample Y3CN9 are reported from the 20-fold diluted analysis in Table 1A; results for other analytes are reported from the 2-fold diluted analysis.

Sample Y3CP5 was reanalyzed at a 5-fold dilution due to high levels of 1,1,2-trichloro-1,2,2-trifluoromethane, trichloroethene, and tetrachloroethene that exceeded the calibration range. Results for these analytes in sample Y3CP5 are reported from the diluted analysis in Table 1A; results for other analytes are reported from the undiluted analysis.

H. Samples Y3CN4 and Y3CN9 were analyzed at 5- and 2-fold dilutions, respectively, due high levels of target analytes. The CRQLs listed for these samples in Table 1A have been multiplied by the dilution factor.

ANALYTICAL RESULTS
Table 1A

Case No. : 36520 SDG No. : Y3CN1
Site : Omega Chem OU2
Lab : Shealy Environmental Services, Inc.
Reviewer : Kendra DeSantolo, ESAT/LDC
Date : 09/14/07

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Trace Level Water Samples for Trace Volatiles

Station Location :	Y3CN1			Y3CN2			Y3CN3			Y3CN4			Y3CN5			Y3CN6		
Sample ID :	Y3CN1			Y3CN2			Y3CN3			Y3CN4			Y3CN5	FB		Y3CN6		
Collection Date :	7/18/2007			7/18/2007			7/18/2007			7/18/2007			7/18/2007			7/19/2007		
Dilution Factor :	1.0			1.0			1.0			5.0			1.0			1.0		
Trace Volatiles	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Dichlorodifluoromethane	0.50U			0.50U			0.45L	J	B	2.5U			0.50U			0.50U		
Chloromethane	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
Vinyl chloride	0.50U			0.58			0.50U			2.5U			0.50U			0.50U		
Bromomethane	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
Chloroethane	0.50U			0.20L	J	B	0.50U			2.5U			0.50U			0.50U		
Trichlorofluoromethane	18		G	4.5			0.29L	J	B	210	J	F	0.50U			0.50U		
1,1-Dichloroethene	24		G	220		G	7.0			580	J	F	0.50U	J	C	0.93		
1,1,2-Trichloro-1,2,2-trifluoroethane	41		G	15			0.54			530	J	F	0.50U			0.50U		
Acetone	5.0U	J	D	1.7L	J	BD	5.0U	J	D	25U	J	D	5.0U	J	D	5.0U	J	D
Carbon Disulfide	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
Methyl acetate	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
Methylene chloride	0.50U	J	C	0.50U	J	C	0.50U	J	C	2.5U	J	C	0.56U	J	C	0.50U	J	C
trans-1,2-Dichloroethene	0.13L	J	BE	2.2	J	E	0.065L	J	BE	2.3L	J	BE	0.50U			0.50U		
Methyl tert-butyl ether	0.50U			0.58			0.13L	J	B	1.9L	J	B	0.50U			0.50U		
1,1-Dichloroethane	1.0			120	J	EG	0.74			3.2	J	E	0.50U			0.21L	J	B
cis-1,2-Dichloroethene	5.5	J	E	230	J	EG	2.2	J	E	11	J	E	0.50U			5.6		
2-Butanone	5.0U			5.0U			5.0U			25U			5.0U			5.0U		
Bromochloromethane	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
Chloroform	1.4U	J	C	2.6U	J	C	1.3U	J	C	140	J	EF	0.50U			0.50U		
1,1,1-Trichloroethane	0.76			17		G	0.50U			2.5U			0.50U			0.50U		
Cyclohexane	0.50U			0.13L	J	B	0.50U			2.5U			0.50U			0.50U		
Carbon tetrachloride	0.42L	J	B	0.50U			0.50U			2.5U			0.50U			0.50U		
Benzene	0.074L	J	B	0.20L	J	B	0.50U			0.53L	J	B	0.50U			0.50U		
1,2-Dichloroethane	0.50U			17			0.50U			19			0.50U			0.50U		
1,4-Dioxane	20U	R	A	100	J	D	14L	J	BD	82L	J	BD	20U	R	A	20U	R	A
Trichloroethene	110		G	100		G	15			400	J	F	0.50U			2.9		

ANALYTICAL RESULTS
Table 1A

Case No. : 36520 SDG No. : Y3CN1
Site : Omega Chem OU2
Lab : Shealy Environmental Services, Inc.
Reviewer : Kendra DeSantolo, ESAT/LDC
Date : 09/14/07

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Trace Level Water Samples for Trace Volatiles

Station Location :	Y3CN1			Y3CN2			Y3CN3			Y3CN4			Y3CN5			Y3CN6		
Sample ID :	Y3CN1			Y3CN2			Y3CN3			Y3CN4			Y3CN5	FB		Y3CN6		
Collection Date :	7/18/2007			7/18/2007			7/18/2007			7/18/2007			7/18/2007			7/19/2007		
Dilution Factor :	1.0			1.0			1.0			5.0			1.0			1.0		
Trace Volatiles	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Methylcyclohexane	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
1,2-Dichloropropane	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
Bromodichloromethane	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
cis-1,3-Dichloropropene	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
4-Methyl-2-pentanone	5.0U			5.0U			5.0U			25U			5.0U			5.0U		
Toluene	0.50U			0.079L	J	B	0.50U			2.5U			0.50U			0.50U		
trans-1,3-Dichloropropene	0.50U			0.50U			0.50U			2.5U			1.3			0.50U		
1,1,2-Trichloroethane	1.2			5.6			3.3			11			0.50U			0.50U		
Tetrachloroethene	80		G	290		G	210		G	1000	J	F	0.50U			0.26L	J	B
2-Hexanone	5.0U			5.0U			5.0U			25U			5.0U			5.0U		
Dibromochloromethane	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
1,2-Dibromoethane	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
Chlorobenzene	0.50U			0.19L	J	B	0.070L	J	B	2.5U			0.50U			0.50U		
Ethylbenzene	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
o-Xylene	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
m,p-Xylene	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
Styrene	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
Bromoform	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
Isopropylbenzene	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
1,1,2,2-Tetrachloroethane	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
1,3-Dichlorobenzene	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
1,4-Dichlorobenzene	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
1,2-Dichlorobenzene	0.50U			0.070L	J	B	0.43L	J	B	2.5U			0.50U			0.50U		
1,2-Dibromo-3-chloropropane	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
1,2,4-Trichlorobenzene	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		
1,2,3-Trichlorobenzene	0.50U			0.50U			0.50U			2.5U			0.50U			0.50U		

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation LImit
N/A - Not Applicable
NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank,
TB - Trip Blank, BG - Background Sample

ANALYTICAL RESULTS
Table 1A

Case No. : 36520 SDG No. : Y3CN1
Site : Omega Chem OU2
Lab : Shealy Environmental Services, Inc.
Reviewer : Kendra DeSantolo, ESAT/LDC
Date : 09/14/07

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Trace Level Water Samples for Trace Volatiles

Station Location :	Y3CN7			Y3CN8			Y3CN9			Y3CP0			Y3CP1			Y3CP2		
Sample ID :	Y3CN7			Y3CN8			Y3CN9			Y3CP0			Y3CP1		FB	Y3CP2		
Collection Date :	7/19/2007			7/19/2007			7/19/2007			7/19/2007			7/19/2007			7/20/2007		
Dilution Factor :	1.0			1.0			2.0			1.0			1.0			1.0		
Trace Volatiles	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Dichlorodifluoromethane	0.38L	J	B	0.50U			1.7			0.50U			0.50U			0.50U		
Chloromethane	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Vinyl chloride	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Bromomethane	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Chloroethane	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Trichlorofluoromethane	1.2			6.1			120		G	0.50U			0.50U			0.50U		
1,1-Dichloroethene	5.7			17			230		G	0.50U	J	C	0.50U	J	C	0.50U	J	C
1,1,2-Trichloro-1,2,2-trifluoroethane	2.7			13			330		G	0.50U			0.50U			0.50U		
Acetone	5.0U	J	D	5.0U	J	D	10U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D
Carbon Disulfide	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Methyl acetate	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Methylene chloride	0.50U	J	C	0.50U	J	C	1.0U	J	C	0.50U	J	C	0.50U	J	C	0.50U	J	C
trans-1,2-Dichloroethene	0.50U			0.50U			0.62L	J	BE	0.50U			0.50U			0.50U		
Methyl tert-butyl ether	0.081L	J	B	0.19L	J	B	0.53L	J	B	0.50U			0.50U			0.50U		
1,1-Dichloroethane	1.4			3.6			0.71L	J	B	0.50U			0.50U			0.50U		
cis-1,2-Dichloroethene	0.66	J	E	1.7	J	E	0.47L	J	BE	0.50U			0.50U			0.50U		
2-Butanone	5.0U			5.0U			10U			5.0U			5.0U			5.0U		
Bromochloromethane	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Chloroform	0.73U	J	C	0.88U	J	C	19			0.50U			0.50U	J	C	0.50U		
1,1,1-Trichloroethane	0.50U			0.50U			0.19L	J	B	0.50U			0.50U			0.50U		
Cyclohexane	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Carbon tetrachloride	0.13L	J	B	0.25L	J	B	1.0U			0.50U			0.50U			0.50U		
Benzene	0.50U			0.072L	J	B	1.0U			0.50U			0.50U			0.052L	J	B
1,2-Dichloroethane	1.8			0.50U			2.8			0.50U			0.50U			0.50U		
1,4-Dioxane	20U	R	A	7.7L	J	BD	16L	J	BD	20U	R	A	20U	R	A	20U	R	A
Trichloroethene	19			37		G	48		G	0.50U			0.50U			0.50U		

ANALYTICAL RESULTS

Case No.: 36520 SDG No.: Y3CN1 **Table 1A**

Site: Omega Chem OU2

Lab: Shealy Environmental Services, Inc.

Reviewer: Kendra DeSantolo, ESAT/LDC **QUALIFIED DATA** **Analysis Type:** Trace Level Water Samples

Date: 09/14/07 **Concentration in ug/L** for Trace Volatiles

Station Location:	Y3CN7			Y3CN8			Y3CN9			Y3CP0			Y3CP1			Y3CP2		
Sample ID:	Y3CN7			Y3CN8			Y3CN9			Y3CP0			Y3CP1		FB	Y3CP2		
Collection Date:	7/19/2007			7/19/2007			7/19/2007			7/19/2007			7/19/2007			7/20/2007		
Dilution Factor:	1.0			1.0			2.0			1.0			1.0			1.0		
Trace Volatiles	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Methylcyclohexane	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
1,2-Dichloropropane	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Bromodichloromethane	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
cis-1,3-Dichloropropene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
4-Methyl-2-pentanone	5.0U			5.0U			10U			5.0U			5.0U			5.0U		
Toluene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
trans-1,3-Dichloropropene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
1,1,2-Trichloroethane	0.18L	J	B	0.37L	J	B	3.3			0.50U			0.50U			0.50U		
Tetrachloroethene	16			28		G	370		G	0.29L	J	B	0.50U			0.50U		
2-Hexanone	5.0U			5.0U			10U			5.0U			5.0U			5.0U		
Dibromochloromethane	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
1,2-Dibromoethane	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Chlorobenzene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Ethylbenzene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
o-Xylene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
m,p-Xylene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Styrene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Bromoform	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
Isopropylbenzene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
1,1,2,2-Tetrachloroethane	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
1,3-Dichlorobenzene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
1,4-Dichlorobenzene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
1,2-Dichlorobenzene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
1,2-Dibromo-3-chloropropane	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
1,2,4-Trichlorobenzene	0.50U			0.50U			1.0U			0.50U			0.50U			0.50U		
1,2,3-Trichlorobenzene	0.50U			0.50U			1.0U		H	0.50U			0.50U			0.50U		

Val - Validity. Refer to Data Qualifiers in Table 1B.

Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.

CRQL - Contract Required Quantitation LImit

N/A - Not Applicable

NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs

FB - Field Blank, EB - Equipment Blank,

TB - Trip Blank, BG - Background Sample

ANALYTICAL RESULTS
Table 1A

Case No. : 36520 SDG No. : Y3CN1
Site : Omega Chem OU2
Lab : Shealy Environmental Services, Inc.
Reviewer : Kendra DeSantolo, ESAT/LDC
Date : 09/14/07

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Trace Level Water Samples for Trace Volatiles

Station Location :	Y3CP3			Y3CP4			Y3CP5			Y3CP6			Y3CP7			Y3CP8		
Sample ID :	Y3CP3			Y3CP4			Y3CP5			Y3CP6	FB		Y3CP7			Y3CP8		
Collection Date :	7/20/2007			7/20/2007			7/20/2007			7/20/2007			7/23/2007			7/23/2007		
Dilution Factor :	1.0			1.0			1.0			1.0			1.0			1.0		
Trace Volatiles	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Dichlorodifluoromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Chloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Vinyl chloride	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Bromomethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Chloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Trichlorofluoromethane	0.50U			0.50U			13			0.50U			0.50U			2.1		
1,1-Dichloroethene	0.50U	J	C	0.50U	J	C	14			0.50U	J	C	0.50U	J	C	1.2		
1,1,2-Trichloro-1,2,2-trifluoroethane	0.42L	J	B	0.39L	J	B	19		G	0.50U			0.50U			4.7		
Acetone	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D
Carbon Disulfide	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Methyl acetate	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Methylene chloride	0.50U	J	C	0.50U	J	C	0.50U	J	C	0.50U	J	C	0.50U	J	C	0.50U	J	C
trans-1,2-Dichloroethene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Methyl tert-butyl ether	0.50U			0.50U			0.25L	J	B	0.50U			0.50U			0.50U		
1,1-Dichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
cis-1,2-Dichloroethene	0.50U			0.064L	J	B	1.6	J	E	0.50U			0.093L	J	B	0.50U		
2-Butanone	5.0U			5.0U			5.0U			5.0U			5.0U			5.0U		
Bromochloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Chloroform	0.50U	J	C	0.50U	J	C	0.91U	J	C	0.50U			0.50U	J	C	0.50U	J	C
1,1,1-Trichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Cyclohexane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Carbon tetrachloride	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Benzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2-Dichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,4-Dioxane	20U	R	A	20U	R	A	20U	R	A	20U	R	A	20U	R	A	20U	R	A
Trichloroethene	0.82			1.2			43		G	0.50U			1.2			18		

ANALYTICAL RESULTS
Table 1A

Case No. : 36520 SDG No. : Y3CN1
Site : Omega Chem OU2
Lab : Shealy Environmental Services, Inc.
Reviewer : Kendra DeSantolo, ESAT/LDC
Date : 09/14/07

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Trace Level Water Samples for Trace Volatiles

Station Location :	Y3CP3			Y3CP4			Y3CP5			Y3CP6			Y3CP7			Y3CP8		
Sample ID :	Y3CP3			Y3CP4			Y3CP5			Y3CP6	FB		Y3CP7			Y3CP8		
Collection Date :	7/20/2007			7/20/2007			7/20/2007			7/20/2007			7/23/2007			7/23/2007		
Dilution Factor :	1.0			1.0			1.0			1.0			1.0			1.0		
Trace Volatiles	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Methylcyclohexane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2-Dichloropropane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Bromodichloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
cis-1,3-Dichloropropene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
4-Methyl-2-pentanone	5.0U			5.0U			5.0U			5.0U			5.0U			5.0U		
Toluene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
trans-1,3-Dichloropropene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,1,2-Trichloroethane	0.50U			0.50U			0.58			0.50U			0.50U			0.50U		
Tetrachloroethene	3.0			9.0			43		G	0.50U			0.38L	J	B	5.5		
2-Hexanone	5.0U			5.0U			5.0U			5.0U			5.0U			5.0U		
Dibromochloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2-Dibromoethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Chlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Ethylbenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
o-Xylene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
m,p-Xylene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Styrene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Bromoform	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Isopropylbenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,1,2,2-Tetrachloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,3-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,4-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2-Dibromo-3-chloropropane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2,4-Trichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2,3-Trichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation Limit
N/A - Not Applicable
NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank,
TB - Trip Blank, BG - Background Sample

ANALYTICAL RESULTS
Table 1A

Case No. : 36520 SDG No. : Y3CN1
Site : Omega Chem OU2
Lab : Shealy Environmental Services, Inc.
Reviewer : Kendra DeSantolo, ESAT/LDC
Date : 09/14/07

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Trace Level Water Samples for Trace Volatiles

Station Location :	Y3CP9			Y3CQ0			Method Blank			Method Blank			Method Blank			Method Blank		
Sample ID :	Y3CP9		D1	Y3CQ0		D1	VBLK1D			VBLK24			VBLK25			VBLK26		
Collection Date :	7/23/2007			7/23/2007														
Dilution Factor :	1.0			1.0			1.0			1.0			1.0			1.0		
Trace Volatiles	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Dichlorodifluoromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Chloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Vinyl chloride	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Bromomethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Chloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Trichlorofluoromethane	0.061L	J	B	0.077L	J	B	0.50U			0.50U			0.50U			0.50U		
1,1-Dichloroethene	1.8			1.9			0.072L	J	B	0.079L	J	B	0.072L	J	B	0.062L	J	B
1,1,2-Trichloro-1,2,2-trifluoroethane	0.22L	J	B	0.25L	J	B	0.50U			0.50U			0.50U			0.50U		
Acetone	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D	5.0U	J	D
Carbon Disulfide	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Methyl acetate	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Methylene chloride	0.50U	J	C	0.50U	J	C	0.17L	J	B	0.21L	J	B	0.14L	J	B	0.15L	J	B
trans-1,2-Dichloroethene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Methyl tert-butyl ether	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,1-Dichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
cis-1,2-Dichloroethene	0.48L	J	B	0.51			0.50U			0.50U			0.50U			0.50U		
2-Butanone	5.0U			5.0U			5.0U			5.0U			5.0U			5.0U		
Bromochloromethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Chloroform	6.4			6.0			0.052L	J	B	0.50U			0.50U			0.50U		
1,1,1-Trichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Cyclohexane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Carbon tetrachloride	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Benzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2-Dichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,4-Dioxane	20U	R	A	20U	R	A	20U	R	A	20U	R	A	20U	R	A	20U	R	A
Trichloroethene	1.2			1.2			0.50U			0.50U			0.50U			0.50U		

ANALYTICAL RESULTS
Table 1A

Case No. : 36520 SDG No. : Y3CN1
Site : Omega Chem OU2
Lab : Shealy Environmental Services, Inc.
Reviewer : Kendra DeSantolo, ESAT/LDC
Date : 09/14/07

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Trace Level Water Samples for Trace Volatiles

Station Location :	Y3CP9			Y3CQ0			Method Blank			Method Blank			Method Blank			Method Blank		
Sample ID :	Y3CP9	D1		Y3CQ0	D1		VBLK1D			VBLK24			VBLK25			VBLK26		
Collection Date :	7/23/2007			7/23/2007														
Dilution Factor :	1.0			1.0			1.0			1.0			1.0			1.0		
Trace Volatiles	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**
Methylcyclohexane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2-Dichloropropane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Bromodichloromethane	1.0			0.90			0.50U			0.50U			0.50U			0.50U		
cis-1,3-Dichloropropene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
4-Methyl-2-pentanone	5.0U			5.0U			5.0U			5.0U			5.0U			5.0U		
Toluene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
trans-1,3-Dichloropropene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,1,2-Trichloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Tetrachloroethene	5.6			6.1			0.50U			0.50U			0.50U			0.50U		
2-Hexanone	5.0U			5.0U			5.0U			5.0U			5.0U			5.0U		
Dibromochloromethane	0.33L	J	B	0.31L	J	B	0.50U			0.50U			0.50U			0.50U		
1,2-Dibromoethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Chlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Ethylbenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
o-Xylene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
m,p-Xylene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Styrene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Bromoform	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
Isopropylbenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,1,2,2-Tetrachloroethane	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,3-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,4-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2-Dichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2-Dibromo-3-chloropropane	0.50U			0.50U			0.50U	J	D	0.50U			0.50U			0.50U		
1,2,4-Trichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		
1,2,3-Trichlorobenzene	0.50U			0.50U			0.50U			0.50U			0.50U			0.50U		

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation LImit
N/A - Not Applicable
NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank,
TB - Trip Blank, BG - Background Sample

ANALYTICAL RESULTS
Table 1A

Case No. : 36520 SDG No. : Y3CN1
Site : Omega Chem OU2
Lab : Shealy Environmental Services, Inc.
Reviewer : Kendra DeSantolo, ESAT/LDC
Date : 09/14/07

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Trace Level Water Samples for Trace Volatiles

Station Location :	Method Blank			Storage Blank			CRQL											
Sample ID :	VBLK2X			VHBLK32														
Collection Date :																		
Dilution Factor :	1.0			1.0														
Trace Volatiles	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**							**Result**	**Val**	**Com**
Dichlorodifluoromethane	0.50U			0.50U			0.50											
Chloromethane	0.50U			0.50U			0.50											
Vinyl chloride	0.50U			0.50U			0.50											
Bromomethane	0.50U			0.50U			0.50											
Chloroethane	0.50U			0.50U			0.50											
Trichlorofluoromethane	0.50U			0.50U			0.50											
1,1-Dichloroethene	0.083L	J	B	0.50U	J	C	0.50											
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50U			0.50U			0.50											
Acetone	5.0U	J	D	5.0U	J	D	5.0											
Carbon Disulfide	0.50U			0.50U			0.50											
Methyl acetate	0.50U			0.50U			0.50											
Methylene chloride	0.18L	J	B	0.68U	J	C	0.50											
trans-1,2-Dichloroethene	0.50U			0.50U			0.50											
Methyl tert-butyl ether	0.50U			0.50U			0.50											
1,1-Dichloroethane	0.50U			0.50U			0.50											
cis-1,2-Dichloroethene	0.50U			0.50U			0.50											
2-Butanone	5.0U			5.0U			5.0											
Bromochloromethane	0.50U			0.50U			0.50											
Chloroform	0.50U			0.54			0.50											
1,1,1-Trichloroethane	0.50U			0.50U			0.50											
Cyclohexane	0.50U			0.50U			0.50											
Carbon tetrachloride	0.50U			0.50U			0.50											
Benzene	0.50U			0.50U			0.50											
1,2-Dichloroethane	0.50U			0.50U			0.50											
1,4-Dioxane	20U	R	A	20U	R	A	20											
Trichloroethene	0.50U			0.50U			0.50											

ANALYTICAL RESULTS
Table 1A

Case No. : 36520 SDG No. : Y3CN1
Site : Omega Chem OU2
Lab : Shealy Environmental Services, Inc.
Reviewer : Kendra DeSantolo, ESAT/LDC
Date : 09/14/07

QUALIFIED DATA
Concentration in ug/L

Analysis Type : Trace Level Water Samples for Trace Volatiles

Station Location :	Method Blank			Storage Blank			CRQL											
Sample ID :	VBLK2X			VHBLK32														
Collection Date :																		
Dilution Factor :	1.0			1.0														
Trace Volatiles	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**	**Result**	**Val**	**Com**							**Result**	**Val**	**Com**
Methylcyclohexane	0.50U			0.50U			0.50											
1,2-Dichloropropane	0.50U			0.50U			0.50											
Bromodichloromethane	0.50U			0.50U			0.50											
cis-1,3-Dichloropropene	0.50U			0.50U			0.50											
4-Methyl-2-pentanone	5.0U			5.0U			5.0											
Toluene	0.50U			0.50U			0.50											
trans-1,3-Dichloropropene	0.50U			0.060L	J	B	0.50											
1,1,2-Trichloroethane	0.50U			0.50U			0.50											
Tetrachloroethene	0.50U			0.50U			0.50											
2-Hexanone	5.0U			5.0U			5.0											
Dibromochloromethane	0.50U			0.50U			0.50											
1,2-Dibromoethane	0.50U			0.50U			0.50											
Chlorobenzene	0.50U			0.50U			0.50											
Ethylbenzene	0.50U			0.50U			0.50											
o-Xylene	0.50U			0.50U			0.50											
m,p-Xylene	0.50U			0.50U			0.50											
Styrene	0.50U			0.50U			0.50											
Bromoform	0.50U			0.50U			0.50											
Isopropylbenzene	0.50U			0.50U			0.50											
1,1,2,2-Tetrachloroethane	0.50U			0.50U			0.50											
1,3-Dichlorobenzene	0.50U			0.50U			0.50											
1,4-Dichlorobenzene	0.50U			0.50U			0.50											
1,2-Dichlorobenzene	0.50U			0.50U			0.50											
1,2-Dibromo-3-chloropropane	0.50U			0.50U	J	D	0.50											
1,2,4-Trichlorobenzene	0.50U			0.50U			0.50											
1,2,3-Trichlorobenzene	0.50U			0.50U			0.50											

Val - Validity. Refer to Data Qualifiers in Table 1B.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation LImit
N/A - Not Applicable
NA - Not Analyzed

D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank,
TB - Trip Blank, BG - Background Sample

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR ORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared according to the document, "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," January 2005.

U The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.

L Indicates results which fall below the Contract Required Quantitation Limit. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.

J The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.

R The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Table 2
Calibration Summary

Case No.: 36520
SDG No.: Y3CN1
Site: Omega Chem OU2
Laboratory: Shealy Environmental Services, Inc.
Reviewer: Kendra DeSantolo, ESAT/LDC
Date: September 13, 2007

RELATIVE RESPONSE FACTORS

	RRF	RRF	RRF	RRF
Analysis date:	7/23/07	7/24/07	7/24/07	7/24/07
Analysis time:	13:48-	05:47	17:28	23:51
GC/MS I.D.:	MSD9	MSD9	MSD9	MSD9
Analyte	Init.	Cont.	Cont.	Cont.
Acetone	0.049	0.048	0.048	0.049
1,4-Dioxane	0.0009	0.0008	0.0009	0.0009
1,4-Dioxane-d8	0.0007	0.0006	0.0007	0.0006

	RRF	RRF	RRF	RRF	RRF
Analysis date:	7/25/07	7/26/07	7/26/07	7/27/07	7/27/07
Analysis time:	06:21	06:07	17:35	06:24	17:34
GC/MS I.D.:	MSD9	MSD9	MSD9	MSD9	MSD9
Analyte	Cont.	Cont.	Cont.	Cont.	Cont.
Acetone	0.048	------	------	------	0.049
1,4-Dioxane	0.0007	0.0010	0.0009	0.0009	0.0008
1,2-dibromo-3-chloropropane	------	------	------	------	0.046
1,4-Dioxane-d8	0.0005	0.0007	0.0006	0.0006	0.0006

ASSOCIATED SAMPLES AND METHOD BLANKS

Initial 07/2307: All samples, method blanks, and storage blank VHBLK32
Cont., 07/24/07 (05:47): Y3CN5 and VBLK24
Cont., 07/24/07 (17:28): Closing standard for Y3CN5 and VBLK24, opening standard for Y3CN6, Y3CN7, Y3CP0 through Y3CP4, Y3CP7 through Y3CQ0 and VBLK2X
Cont., 07/24/07 (23:51): Closing standard for Y3CN6, Y3CN7, Y3CP0 through Y3CP4, Y3CP7 through Y3CQ0 and VBLK2X
Cont., 07/25/07 (06:21): Y3CN1 through Y3CN3, Y3CN8, Y3CP5, Y3CP6, and VBLK25
Cont., 07/26/07 (06:07): Y3CN1DL, Y3CN2DL, Y3CN3DL, Y3CN2DL2, Y3CN4, Y3CN4DL, Y3CN8DL, Y3CN9, Y3CN9DL, and VBLK26

Cont., 07/26/07 (17:36): Closing standard for Y3CN1DL, Y3CN2DL, Y3CN3DL, Y3CN2DL2, Y3CN4, Y3CN4DL, Y3CN8DL, Y3CN9, Y3CN9DL, and VBLK26
Cont., 07/27/07 (06:24): Y3CP5DL; storage blank VHBLK32; and VBLK1D
Cont., 07/27/07 (17:34): Y3CP5DL; storage blank VHBLK32; and VBLK1D

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	36520
DAS No:	
SDG No:	Y3CL1, Y3CN1

L

Date Shipped:	7/18/2007
Carrier Name:	FedEx
Airbill:	799177129103, 7923802365
Shipped to:	Shealy Environmental 106 Vantage Point Drive Cayce SC 29033 (803) 791-9700

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	7-18-07 1400		
2			
3			
4		7/19/07 0930	

Sampler Signature:

For Lab Use Only

Lab Contract No:	EPW05031
Unit Price:	
Transfer To:	
Lab Contract No:	
Unit Price:	

ORGANIC $AMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
Y3CN0	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21), SVOA (21)	255 (Ice Only), 256 (Ice Only), 257 (Ice Only), 258 (Ice Only), 259 (HCL), 260 (HCL), 261 (HCL), 262 (HCL), 263 (HCL), 264 (HCL), 265 (HCL), 266 (HCL) (12)	Y3CN0	S: 7/18/2007	8:25		OK
Y3CN1	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21), SVOA (21)	267 (Ice Only), 268 (Ice Only), 269 (HCL), 270 (HCL), 271 (HCL), 272 (HCL) (6)	Y3CN1	S: 7/18/2007	9:15		
Y3CN2	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21), SVOA (21)	273 (Ice Only), 274 (Ice Only), 275 (HCL), 276 (HCL), 277 (HCL), 278 (HCL) (6)	Y3CN2	S: 7/18/2007	10:10		
Y3CN3	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21), SVOA (21)	279 (Ice Only), 280 (Ice Only), 281 (HCL), 282 (HCL), 283 (HCL), 284 (HCL) (6)	Y3CN3	S: 7/18/2007	11:15		
Y3CN4	Ground Water/ Robert Hernandez	M/G	SIM TVOA (21), SVOA (21)	285 (Ice Only), 286 (Ice Only), 287 (HCL), 288 (HCL), 289 (HCL), 290 (HCL) (6)	Y3CN4	S: 7/18/2007	12:12		
Y3CN5	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21)	291 (HCL), 292 (HCL), 293 (HCL), 294 (HCL) (4)	Y3CN5	S: 7/18/2007	13:00		

COPY
ORIGINAL DOCUMENTS INCLUDED IN CSF Y3CL1-3605
Signature
07/23/07
Date

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: Y3CN0	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 5.3, 4.6	Chain of Custody Seal Number: NA
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

SIM TVOA = CLP TCL Volatiles (including SIM), SVOA = 1,4-Dioxane

5 of 1579

TR Number: 9-373659945-071807-0002

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

LABORATORY COPY

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	36520
DAS No:	
SDG No:	Y3CN1

L

Date Shipped:	7/19/2007
Carrier Name:	FedEx
Airbill:	790294947320, 799177924(
Shipped to:	Shealy Environmental 106 Vantage Point Drive Cayce SC 29033 (803) 791-9700

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	1400		
2			
3			
4			7/20/07 0930

Sampler Signature:

For Lab Use Only

Lab Contract No:	EPW05031
Unit Price:	
Transfer To:	
Lab Contract No:	
Unit Price:	

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
Y3CN6	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21), SVOA (21)	297 (Ice Only), 298 (Ice Only), 299 (HCL), 300 (HCL), 301 (HCL), 302 (HCL) (6)	Y3CN6	S: 7/19/2007	8:30		OK
Y3CN7	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21), SVOA (21)	303 (Ice Only), 304 (Ice Only), 305 (HCL), 306 (HCL), 307 (HCL), 308 (HCL) (6)	Y3CN7	S: 7/19/2007	9:25		
Y3CN8	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21), SVOA (21)	309 (Ice Only), 310 (Ice Only), 311 (HCL), 312 (HCL), 313 (HCL), 314 (HCL) (6)	Y3CN8	S: 7/19/2007	9:55		
Y3CN9	Ground Water/ Robert Hernandez	M/G	SIM TVOA (21), SVOA (21)	315 (Ice Only), 316 (Ice Only), 317 (HCL), 318 (HCL), 319 (HCL), 320 (HCL) (6)	Y3CN9	S: 7/19/2007	11:07		
Y3CP0	Ground Water/ Robert Hernandez	M/G	SIM TVOA (21), SVOA (21)	321 (Ice Only), 322 (Ice Only), 323 (HCL), 324 (HCL), 325 (HCL), 326 (HCL) (6)	Y3CP0	S: 7/19/2007	12:45		
Y3CP1	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21)	327 (HCL), 328 (HCL), 329 (HCL), 330 (HCL) (4)	Y3CP1	S: 7/19/2007	13:00		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt: 3.8, 4.4	Chain of Custody Seal Number: NA
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Custody Seal Intact? Y	Shipment Iced? Y

SIM TVOA = CLP TCL Volatiles (including SIM), SVOA = 1,4-Dioxane

6 of 1579

TR Number: 9-373659945-071907-0001

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

LABORATORY COPY

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 36520
DAS No:
SDG No: Y3CN1

L

Date Shipped:	7/20/2007
Carrier Name:	FedEx
Airbill:	791726191401
Shipped to:	Shealy Environmental 106 Vantage Point Drive Cayce SC 29033 (803) 791-9700

Chain of Custody Record

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1		7-20-07 1200		
2				
3				
4				7/21/07 1100

Sampler Signature:

For Lab Use Only

Lab Contract No: EPW03031 5
SAW07/26/07
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
Y3CP2	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21), SVOA (21)	331 (Ice Only), 332 (Ice Only), 333 (HCL), 334 (HCL), 335 (HCL), 336 (HCL) (6)	Y3CP2	S: 7/20/2007	7:25	OK
Y3CP3	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21), SVOA (21)	337 (Ice Only), 338 (Ice Only), 339 (HCL), 340 (HCL), 341 (HCL), 342 (HCL) (6)	Y3CP3	S: 7/20/2007	8:17	
Y3CP4	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21), SVOA (21)	343 (Ice Only), 344 (Ice Only), 345 (HCL), 346 (HCL), 347 (HCL), 348 (HCL) (6)	Y3CP4	S: 7/20/2007	9:05	
Y3CP5	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21), SVOA (21)	349 (Ice Only), 350 (Ice Only), 351 (HCL), 352 (HCL), 353 (HCL), 354 (HCL) (6)	Y3CP5	S: 7/20/2007	10:20	
Y3CP6	Ground Water/ Robert Hernandez	L/G	SIM TVOA (21)	361 (HCL), 362 (HCL), 363 (HCL), 364 (HCL) (4)	Y3CP6	S: 7/20/2007	11:00	

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt 4.0	Chain of Custody Seal Number: NA
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Y / Shipment Iced? Y

SIM TVOA = CLP TCL Volatiles (including SIM), SVOA = 1,4-Dioxane

TR Number: 9-373659945-072007-0001

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

7 of 1573

Shealy Environmental Services, Inc.

Contract Number: EPW05031
Date: 08/06/2007
Revision Date: 09/10/07

SDG Narrative

Case 36520
SDG Y3CN1
EPA Sample Numbers

EPA Sample Number	TVOA Fraction	Dilution/ Reanalysis	TVOA SIM Fraction	Dilution/ Reanalysis	BNA SIM Fraction	Dilution/ Reanalysis	Aqueous VOA Sample pH Value
Y3CN1	Yes	Yes	Yes	No	Yes	No	<2
Y2CN2	Yes	Yes	Yes	No	Yes	No	<2
Y3CN3	Yes	Yes	Yes	No	Yes	No	<2
Y3CN4	Yes	Yes	Yes	Yes	Yes	No	<2
Y3CN5	Yes	No	Yes	No	No	No	<2
Y3CN6	Yes	Yes	Yes	No	Yes	No	<2
Y3CN7	Yes	Yes	Yes	No	Yes	No	<2
Y3CN8	Yes	Yes	Yes	No	Yes	No	<2
Y3CN9	Yes	Yes	Yes	No	Yes	No	<2
Y3CP0	Yes	Yes	Yes	No	Yes	No	<2
Y3CP1	Yes	Yes	Yes	No	No	No	<2
Y3CP2	Yes	Yes	Yes	No	Yes	No	<2
Y3CP3	Yes	Yes	Yes	No	Yes	No	<2
Y3CP4	Yes	Yes	Yes	No	Yes	No	<2
Y3CP5	Yes	Yes	Yes	No	Yes	No	<2
Y3CP6	Yes	No	Yes	No	No	No	<2
Y3CP7	Yes	Yes	Yes	No	Yes	No	<2
Y3CP8	Yes	Yes	Yes	No	Yes	No	<2
Y3CP9	Yes	Yes	Yes	No	Yes	No	<2
Y3CQ0	Yes	No	Yes	No	Yes	No	<2

Columns	TVOA DB-624, 30m x 0.25mm x 1.4um BNA DB-5.625ms, 20m x 0.18mm x 0.36um
Trap	OI Trap #10
VOA Equation	$\text{Water sample concentration (ug/L)} = \frac{(A_x)(I_s)(DF)}{(A_{is})(\overline{RRF})(V_o)}$ Where Ax is the area of the characteristic ion (EICP) for the compound to be measured. Ais is the area of the characteristic ion (EICP) for the internal standard. Is is the amount of internal standard added, in ng. $\overline{RRF}$ is the mean relative response factor from the initial calibration. DF is the dilution factor. Vo is total volume of water purged, in mL.

BNA Equation	$$\text{Water sample concentration ug/L} = \frac{(A_x)(I_s)(V_t)(DF)(GPC)}{(A_{is})(\overline{RRF})(V_o)(V_i)}$$

Where
Ax is the area of the characteristic ion (EICP) for the compound to be measured.
Ais is the area of the characteristic ion (EICP) for the internal standard.
Is is the amount of internal standard added, in ng.
$\overline{RRF}$ is the mean relative response factor from the initial calibration.
DF is the dilution factor.
GPC = Vin/Vout : GPC factor.
Vin is the volume of extract loaded onto GPC column.
Vout is the volume of extract collected after GPC cleanup.
Vt is volume of the concentrated extract in uL. (If no GPC cleanup is performed, then Vt = 1000uL. If GPC cleanup is performed, then Vt = Vout.).
Vi is the volume of the extract injected in uL.
Vo: Volume of water extracted in mL

Sample Receiving

The cooler temperatures associated with these samples were 5.3, 4.6, 4.4, 3.8, 4.6, 3.7, and 4.7°C.

The TR/CoC listed the samples as having a 21 day turn around time. Per the scheduling notification the samples were requested by SMO for 14 day turn and were processed by the lab in this manner.

TVOA Fraction

The peak eluting at ~5.78min on MSD9 in all analyses is pentafluorobenzene. This is an internal standard compound that is not being used for quantitation. This compound is not being identified as a TIC.

Manual integration was performed on 1,4-dioxane and/or 1,4-dioxane-d8 for some standards due to incorrect auto integration.

Manual integration was performed on toluene-d8 for standard VSTD00123 due to incorrect auto integration.

Manual integration was performed on 1,4-dioxane for sample Y3CN4 due to incorrect auto integration.

Samples Y3CN4 and Y3CN9 were only analyzed at dilutions of 2x or greater due to multiple compounds detected over the calibration range.

The ending CCV for MSD 9 on 07/25/07 was not analyzed due to an instrument malfunction. There was insufficient sample volume remaining to perform another analysis.

The CCV VSTD0052B passed both opening and closing criteria. Therefore, data collection continued without analyzing a new tune standard.

The Internal Standard area in sample Y3CN4DL is outside of limits. The sample was not re-analyzed due to insufficient sample volume remaining.

All surrogates did not pass acceptance limits in the blank, VBLK2X run on 07/24/07. The associated samples were re-analyzed the next day and both sets of data are included.

The internal standard recoveries for sample Y3CN4DL (50-fold dilution) were high and outside the acceptance limits. It was probably due to a one-time instrument malfunction that extra volume of the internal standard spiking solution was added during the analysis. This extra amount of internal standard caused the large discrepancies

between the 5 (reported as Y3CN4) and 50-fold dilution analyses. Total of 4 vials were received for sample Y3CN4. One was used for screening; two were used for the TVSIM analysis. The last one was used for the 5 and 50-fold dilutions. There was insufficient volume of sample to perform another 50-fold dilution.

TVOA SIM Fraction

Manual integration was performed on 1,4-dioxane for samples Y3CP0, Y3CP5, Y3CP9, Y3CN5, Y3CN6, Y3CN7, Y3CN9, and blanks VBLK25, VBLK26, VBLK31, VHBLK32, VHBLK32RE due to incorrect auto integration.

Manual integration was performed on 1,4-dioxane-d8 for sample Y3CN4 due to incorrect auto integration.

Sample Y3CN4 was re-analyzed due to the possibility of carryover in the first analysis. Both sets of data are included.

The 1,4-dioxane results for samples Y3CN2 and Y3CN4 were over the calibration range however, samples could not be re-analyzed due to insufficient volume remaining.

BNA SIM Fraction

None.

I certify that this Sample Data Package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Robert Slee for DJW

Daniel J. Wright
Laboratory Director

8/10/07

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
Y3CN4

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 36520 Mod. Ref No.: _____ SDG No.: Y3CN1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: IG19018-004

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 90726A10

Level: (TRACE or LOW/MED) TRACE Date Received: 07/19/2007

% Moisture: not dec. _____ Date Analyzed: 07/26/2007

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.857	4.9	J D
02	~~541-05-9~~	~~Cyclotrisiloxane, hexamethyl~~	~~9.176~~	~~14~~	~~NJ DB~~
03	~~556-67-2~~	~~Cyclotetrasiloxane, octameth~~	~~11.566~~	~~13~~	~~NJ DB~~
04		~~Unknown-02~~	~~12.181~~	~~14~~	~~J DB~~
05		~~Unknown-03~~	~~12.312~~	~~5.9~~	~~J DB~~
06		~~Unknown-04~~	~~12.560~~	~~15~~	~~J DB~~
07		~~Unknown-05~~	~~12.962~~	~~5.2~~	~~J D~~
08		~~Unknown-06~~	~~15.033~~	~~3.9~~	~~J D~~
09					
10		SC, 9/4/07.			
11					
12					
13					
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19					
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21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
Y3CN9

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-05-031

Lab Code: SHEALY Case No.: 36520 Mod. Ref No.: _____ SDG No.: Y3CN1

Matrix: (SOIL/SED/WATER) Water Lab Sample ID: IG20012-004

Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 90726A09

Level: (TRACE or LOW/MED) TRACE Date Received: 07/20/2007

% Moisture: not dec. _____ Date Analyzed: 07/26/2007

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.869	5.4	J D
02	~~541-05-9~~	~~Cyclotrisiloxane, hexamethyl~~	~~9.176~~	~~7.0~~	~~NJ DB~~
03	~~556-67-2~~	~~Cyclotetrasiloxane, octameth~~	~~11.566~~	~~6.4~~	~~NJ DB~~
04		~~Unknown-02~~	~~12.181~~	~~5.6~~	~~J DB~~
05		~~Unknown-03~~	~~12.311~~	~~2.3~~	~~J DB~~
06		~~Unknown-04~~	~~12.560~~	~~7.0~~	~~J DB~~
07		~~Unknown-05~~	12.962	2.7	J D
08					
09		SC, 9/4/07			
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27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1]EPA-designated Registry Number.